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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,434	03/01/2004	Toshiaki Okuno	50212-573	7020
7590 09/09/2004			EXAMINER	
McDermott, Will & Emery 600 13th Street, N.W. Washington, DC 20005-3096			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/788,434

Applicant(s)

OKUNO, TOSHIAKI

Examiner

Hanh Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 10-13, 15 and 18-21 is/are rejected.  
7) ☒ Claim(s) 14, 16 and 17 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/30/2004.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "said first station, said second station" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10-12 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Onaka et al (US Patent No. 6,351,323 cited by applicant).

Regarding claim 10, referring to figures 32A, 32B and 35, Onaka discloses a line switching device comprising:

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a branching section (i.e., OADM device, Figs. 32A and 32B) branching signals in a predetermined wavelength band contained in a signal wavelength band from signals propagating through an optical transmission line in an optical communication network; and

a dispersion compensating module (i.e., a dispersion compensating module, Fig. 35) comprising:

an input end for introducing signals which propagate in the optical transmission line (as indicated in Fig. 35, an input end for inputting the signals to an input port of optical switch 341);

an output end for launching the signals introduced from the input end to said optical transmission line (as indicated in Fig. 35, an output end for outputting the signals from an output port of optical coupler 340);

a plurality of dispersion compensators (i.e., dispersion compensation units, Fig. 35) provided between the input end and the output end, each of the dispersion compensators having a dispersion of sign opposite to that of a dispersion of the optical transmission line in the signal wavelength band; and

one or more branching optical switches (i.e., optical switches 341, Fig. 35) provided between each of the plurality of dispersion compensators (i.e., dispersion compensation units, Fig. 35), each of the branching optical switches (i.e., optical switch 341) having a first port for inputting the signals from an adjacent dispersion compensator positioned upstream as viewed from a traveling direction of the signals, a second port for outputting the signals from the first port to an adjacent

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dispersion compensator positioned downstream, and a third port for conducting the signals from the first port to a branch line different from an optical path constituted by the plurality of dispersion compensators, said dispersion compensating module compensating for the dispersion of said optical transmission line, in the predetermined wavelength band containing the signals branched by said branching section (Fig. 35, col. 36, lines 32-48).

Regarding claim 11, Onaka further teaches the branching section includes an add drop multiplexer (Figs. 32A and 32B).

Regarding claim 12, Onaka further teaches the branching section includes an optical cross connect (Fig. 1).

Regarding claim 19, Onaka further teaches the optical transmission line includes a ring-type network (Fig. 45).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13, 15, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onaka et al (US Patent No. 6,351,323, cited by applicant) in view of Ishikawa (US Patent No. 6,320,687, cited by applicant).

Regarding claim 13, Onaka teaches all the limitations of the claimed invention as set forth in the rejection claim 10 above except fails to teach a control section for controlling a branching function of said branching section and a port switching operation of each of said optical switches in said dispersion compensating module in a mutually interlocked relation. However, Ishikawa teaches a control section (i.e., a controller, Fig. 13) for controlling port switching in at least one of the branching optical switches (i.e., optical switches 38, Fig. 13) so that the signals inputted from the first port are outputted from one of the second and third ports (Fig. 13, col. 8, lines 23-45). Therefore, it would have been obvious to having skill in the art at the time the invention was made to incorporate the control section for controlling a branching function of said branching section and a port switching operation of each of said optical switches in said dispersion compensating module in a mutually interlocked relation as taught by Ishikawa in the system of Onaka. One of ordinary skill in the art would have been motivated to do this since Ishikawa suggests in column 8, lines 24-45 that using such a control section for controlling a branching function of said branching section and a port switching operation of each of said optical switches in said dispersion compensating module in a mutually interlocked relation has advantage of allowing individually controlling the port switch of each of the optical switches so as compensating the dispersion of the signals.

Regarding claim 18, the combination of Onaka and Ishikawa teaches dispersion compensating module is provided in at least one of said first station, said second station and a repeater provided between the first station and the second station (Fig. 11 of Ishikawa).

Regarding claim 20, the combination of Onaka and Ishikawa teaches wherein at least one of signal channels in the signal wavelength band is a signal channel contained in a wavelength range of 1,530 nm to 1,565 nm (col. 5 of Ishikawa, lines 25-38).

Regarding claim 21, the combination of Onaka and Ishikawa teaches wherein at least one of signal channels in the signal wavelength band is a bit rate of 10 Gb/s or more (col. 5 of Ishikawa, lines 25-38).

#### ***Allowable Subject Matter***

7. Claims 14, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Hanh Phan  
Patent Examiner  
Art Unit 2633

*Hanh Phan*  
08/30/04